

REMARKS

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

This communication is in response to the Office Action mailed November 27, 2007.

Before addressing the specific rejection contained in the Office Action, applicant respectfully requests a copy of initialed form PTO-1449s for the Information Disclosure Statements filed December 13, 2007 having 1 reference and Feb. 13, 2008 having 17 references.

Independent claim 23 was rejected as being anticipated by Huang et al. "Recent Improvements on Microsoft's Trainable Text-to-Speech System - Whistler". With this amendment, applicants have amended claim 23 to recite "generating synthesized speech using the sequence of speech segments without further prosody modification." Huang et al. do not teach or suggest this feature, and in fact, teach just the opposite. Referring to Figure 1 of Huang et al. and the accompanying description, for example, first paragraph, first column on page 960 or the description provided in Section 2.2, it is clear that Huang et al. specifically teach obtaining prosody information and using it in order to generate synthesized speech.

With this Amendment, claim 23 has also been amended to include the features previously recited in claim 24. Claim 24 was rejected based on the combination of Huang et al. and Seide (U.S. Patent 5,857,169). As amended claim 23 now recites, in part, "...identifying a set of candidate speech segments for each speech unit based on the context information, wherein identifying a set of candidate speech segments for a speech unit comprises applying the context information for a speech unit to a decision tree to identify a leaf node containing candidate speech segments for the speech unit..."

Column 3, lines 9-35 were cited as teaching the emphasized feature above. For convenience Col. 3,, lines 9-35 are provided:

It is known from EP-A-627-726 to reduce the percentage of time required for the likelihood calculation by organizing the reference probability densities, using a tree structure, and performing a tree search. At the lowest level of the tree (level 1), each of the leaf nodes corresponds to an actual reference probability density. As described earlier, a reference probability density represents an elementary cluster of reference vectors. At level two of the tree, each non-leaf node corresponds to a cluster probability density, which is derived from all reference probability densities corresponding to leaf nodes in branches below the non-leaf node. As such, a level two non-leaf node represents a cluster of a cluster of reference vectors. This hierarchical clustering is repeated for successively higher levels, until at the highest level of the tree, one non-leaf node (the root node) represents all reference vectors. During the pattern recognition, for each input observation vector, a tree search is performed starting at one level below the root. For each node at this level, the corresponding cluster probability density is used to calculate the likelihood of the observation vector. One or more nodes with maximum likelihood are selected. For these nodes, the same process is repeated one level lower. In this manner, finally a number of leaf nodes are selected for which the corresponding reference probability density is used to calculate the likelihood of the observation vector. For each leaf node which is not selected, the likelihood is

approximated by the likelihood of its mother node, which was last selected.

Applicants respectfully fail to see how the cited portion of Seide teaches, suggests or renders obvious "identifying a set of candidate speech segments for a speech unit comprises applying the context information for a speech unit to a decision tree to identify a leaf node containing candidate speech segments for the speech unit" as recited in amended claim 23. Although Seide describes a tree having nodes, the detailed discussion does not pertain to speech synthesis at all, much less applying context information as presently recited. It is respectfully submitted that one of ordinary skill in the art would not find this passage instructive, or even relevant to speech syntheses, and thus, would never combine it with Huang to obtain the invention now recited by claim 23.

Claim 23 has also been amended to include the features previously recited in claim 27.

In view of the foregoing, it is respectfully submitted that claim 23 is in condition for allowance.

With this Amendment, claim 28 has been written as an independent claim to include the features previously recited in claims 23 and 24. For at least the reasons discussed above with respect to claim 23, it is believed claim 28 is also allowable.

Dependent claims 25, 26, 29 and newly added claims 31 and 32 depend from independent claims 23 and 28. Each of these claims recite further features, which are also not taught, suggested or rendered obvious in view of the cited reference. Therefore, it is submitted that these claims are also allowable.

The foregoing remarks are intended to assist the Office in examining the application and in the course of explanation may employ shortened or more specific or variant descriptions of some of the claim language. Such descriptions are not intended to limit the scope of the claims; the actual

claim language should be considered in each case. Furthermore, the remarks are not to be considered exhaustive of the facets of the invention which are rendered patentable, being only examples of certain advantageous features and differences, which applicant's attorney chooses to mention at this time. For the foregoing reasons, applicant reserves the right to submit additional evidence showing the distinction between applicant's invention to be unobvious in view of the prior art.

Furthermore, in commenting on the references and in order to facilitate a better understanding of the differences that are expressed in the claims, certain details of distinction between the same and the present invention have been mentioned, even though such differences do not appear in all of the claims. It is not intended by mentioning any such unclaimed distinctions to create any implied limitations in the claims.

An extension of time for consideration of this Amendment is requested. A charge authorization is provided with the online filing of this paper.

Respectfully submitted,

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